

REMARKS

The application includes claims 1-44 prior to entering this amendment.

The Applicant amends claims 1-6, 10-16, 27, 30, 33, and 36-41 and cancels claims 18-26 and 32 without prejudice.

The Applicant adds new claims 45-54. No new matter is added.

The application remains with claims 1-17, 27-31, and 33-54 after entering this amendment.

Statement of Common Ownership under U.S.C. 103(c)

According to section 103(c), subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability. U.S. Patent 6,658,659 was first published on August 21, 2003. The present application was filed on August 21, 2003.

U.S. Patent 6,658,659 was used to reject claims 7, 24, 33, and 42. Both U.S. Patent 6,658,659 and the co-pending present application were, at the time the invention was made, owned by the same entity or subject to an obligation of assignment to the same entity. Therefore, Applicant respectfully requests that U.S. Patent 6,658,659 be removed as a reference under 35 U.S.C. § 103(a).

Claim 33 is amended to recite the same features of original claims 27 and 32, such that the amendment of claim 33 would not necessitate a further patent search or new grounds for rejection. U.S. Patent 6,658,659 (Hiller) was used to reject claims 7, 24, 33, and 42. In view of Applicant's Statement of Common Ownership, Applicant believes the rejection under 35 U.S.C. § 103(a) in view of Hiller is improper, and that claims 7, 24, 33, and 42 are allowable at least for that reason.

Claim Rejections - 35 U.S.C. § 103

The Examiner rejected claims 1-44 under 35 U.S.C. § 103(a) over Provencher *et al.* (U.S. Patent 6,639,910) and variously in view of "Networking Explained, Second Edition" by Gallo *et al.* ("Gallo"), Lownes (U.S. Patent Application Publication No. 2003/0084440), Toms *et al.* (U.S. Patent 5,263,168), and Hiller *et al.* (U.S. Patent 6,658,659).

The rejection is traversed; however, Applicant amends claims 1-6, 10-16, 27, 30, 33, and 36-41 and cancels claims 18-26 and 32 to expedite prosecution, and without prejudice with regard to pursuing the claims as previously presented or in other forms in a continuation or other application. For example, amended claim 1 recites a method of resetting an electronic device comprising:

- separating software operations associated with layer two of an International Standardization Organization Open Systems Interconnect (ISO/OSI) reference model from other layers in said ISO/OSI reference model, wherein said electronic device is configured to implement said software operations, and wherein a backup copy of said software operations is stored locally on said electronic device;

- resetting said software operations in said layer two of said electronic device using said backup copy of said software operations, wherein a layer two functionality associated with said software operations is temporarily unavailable during said software reset;

- maintaining continuity for a communication session between said electronic device and other electronic devices coupled together through a network during said software reset; and

- recovering execution of said layer two functionality associated with said software operations before said continuity of said communication session is terminated.

In rejecting claim 1, the Examiner acknowledged that Provencher fails to disclose the ISO/OSI layers, and instead suggested that Gallo discloses these features. The Examiner further alleged that Provencher discloses maintaining continuity for a communication session, and identified column 6, lines 13-18 in support.

Provencher is directed to a system that separates internal and external controls of a network device (Abstract). Provencher teaches that separate processors are used for the data plane and control plane in Provencher to provide a more stable architecture (col. 3, line 66 to col. 4, line 3). According to Provencher, by providing a decoupled architecture, when one subsystem is down data may be diverted to another, redundant subsystem (col. 6, lines 8-13).

This is contrasted to the features recited by claim 1, *wherein a layer two functionality associated with said software operations is temporarily unavailable during said software reset*. Provencher does not teach that the layer two functionality is temporarily unavailable, rather his system provides for continued operation by including multiple internal and external devices in case of a fault (col. 9, lines 42-46). The

multiple, redundant devices take the place of the failed device in Provencher, such that layer two functionality is continuously available (col. 11, lines 30-35). Of course, Provencher's approach requires the existence of multiple subsystems for each device layer.

By way of further example, amended claim 10 recites a method comprising:

- initiating a communication between an electronic device and one or more devices in a network, wherein a data plane and a control plane in said electronic device are separated, wherein said data plane and said control plane are configured to control said communication between said electronic device and said one or more devices in said network, and wherein said data plane is associated with layer two of an International Standardization Organization Open Systems Interconnect (ISO/OSI) reference model;

- uploading a bootstrap code to said electronic device, wherein said bootstrap code is configured to load software operations for said electronic device;

- loading said software operations in said data plane, wherein data plane functionality is temporarily disabled during said loading of said software operations;

- maintaining continuity in said communication at layer one of said ISO/OSI reference model during said loading of said software operations, wherein said data plane is separated from said layer one of said electronic device;

- maintaining said continuity in said communication at layers above said layer two during said loading of said software operations; and

- recovering execution of said data plane functionality before said continuity in said communication is terminated at said control plane.

In rejecting claim 10, the Examiner stated that Provenchar discloses maintaining continuity at layer one of said ISO/OSI reference model, and cited column 6, lines 13-18 in support. Applicant respectfully disagrees with the Examiner's interpretation. Even assuming, for argument's sake, that the combination of Provenchar with Gallo is proper, such a combination should be interpreted consistently so as to clearly distinguish layer one, layer two, and layers above layer two as they would be understood in Provenchar.

From the rejection of claim 1, Applicant understands the Examiner's argument to be that the combination of Provenchar with Gallo teaches that Provenchar's data plane is comparable to layer two. Presumably, according to this argument, the control plane of Provenchar would be commensurate in scope to layers above layer two. Whereas Provenchar indicates that the data plane can include a physical connection subsystem

(col. 5, lines 7-10), the Examiner appears to be arguing, in referencing column 6, lines 13-18, that the data plane also discloses layer one of the ISO/OSI model. According to this interpretation, one is left with the circular argument that continuity of the communication session of the data plane is maintained while continuity of the communication session of the data plane is maintained. To facilitate prosecution, Applicant amends claim 10 to recite *maintaining continuity in said communication at layer one of said ISO/OSI reference model during said loading of said software operations, wherein said data plane is separated from said layer one of said electronic device*. Provenchar does not disclose that the data plane is separate from layer one of said ISO/OSI reference model, rather he teaches that the data plane includes a physical subsystem.

Claim 10 is further amended to recite *uploading a bootstrap code to said electronic device, wherein said bootstrap code is configured to load software operations for said electronic device*. The Examiner acknowledged that Provenchar and Gallo fail to disclose the bootstrap code (top of page 8 of the Office Action), and instead suggested that Lownes discloses these features.

Lownes is directed to an open-cable compliant set-top-box that receives software upgrades via a smart card. Lownes discloses a physical layer 36, data recording layer 38, and system layer 40 of the smart card. Although Lowne fails to specifically identify any ISO/OSI layers, and assuming for argument's sake that the combination of Lownes with Provenchar and Gallo is proper, one skilled in the art would expect that any interpretation of the layers described by Lownes would be consistent with the Examiner's previous statements. Namely, that the physical layer 36 of Lownes would correspond to layer one of the ISO/OSI model, that the data recording layer 38 of Lownes would correspond to layer two of the ISO/OSI model, and that the system layer 40 of Lownes would correspond to layers above layer two of the ISO-OSI model.

According to Lownes, the smart card is used to update software at the system layer, or at layers above layer two. Claim 10, by contrast, recites *loading said software operations in said data plane, wherein data plane functionality is temporarily disabled during said loading of said software operations*. Therefore, Lownes fails to cure the deficiencies of Provenchar and Gallo.

Applicant further remarks that Lownes discloses that the bootstrap loader resides in Read Only Memory (ROM). Accordingly, Lownes fails to disclose *uploading a bootstrap code to said electronic device, wherein said bootstrap code is configured to load software operations for said electronic device*, as recited by claim 10.

Claims 27, 33, and 36 are believed to be allowable for at least some of the reasons provided above with respect to claims 1 and 10. As claims 2-9, 11-17, 28-32, 34, 35 and 37-44 depend from claim 1, 10, 27, or 36, they are believed to be patentable over the art for at least the foregoing reasons, as well as for the further novel features recited respectively therein.

Accordingly, withdrawal of the rejection of claims 1-44 is respectfully requested.

Any statements made by Examiner that are not addressed by Applicants do not necessarily constitute agreement by the Applicants. In some cases, Applicants may have amended or argued the allowability of independent claims thereby obviating grounds for rejection of the dependent claims.

New Claims

The Applicant adds new claims 45-54 for consideration. No new matter is added.

Conclusion

For the foregoing reasons, the Applicant requests reconsideration and allowance of all pending claims. The Examiner is encouraged to telephone the undersigned if it appears that an interview would be helpful in advancing the case.

Customer No. 73552

Respectfully submitted,

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A handwritten signature in cursive script, reading "Bryan Kirkpatrick", written over a horizontal line.

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